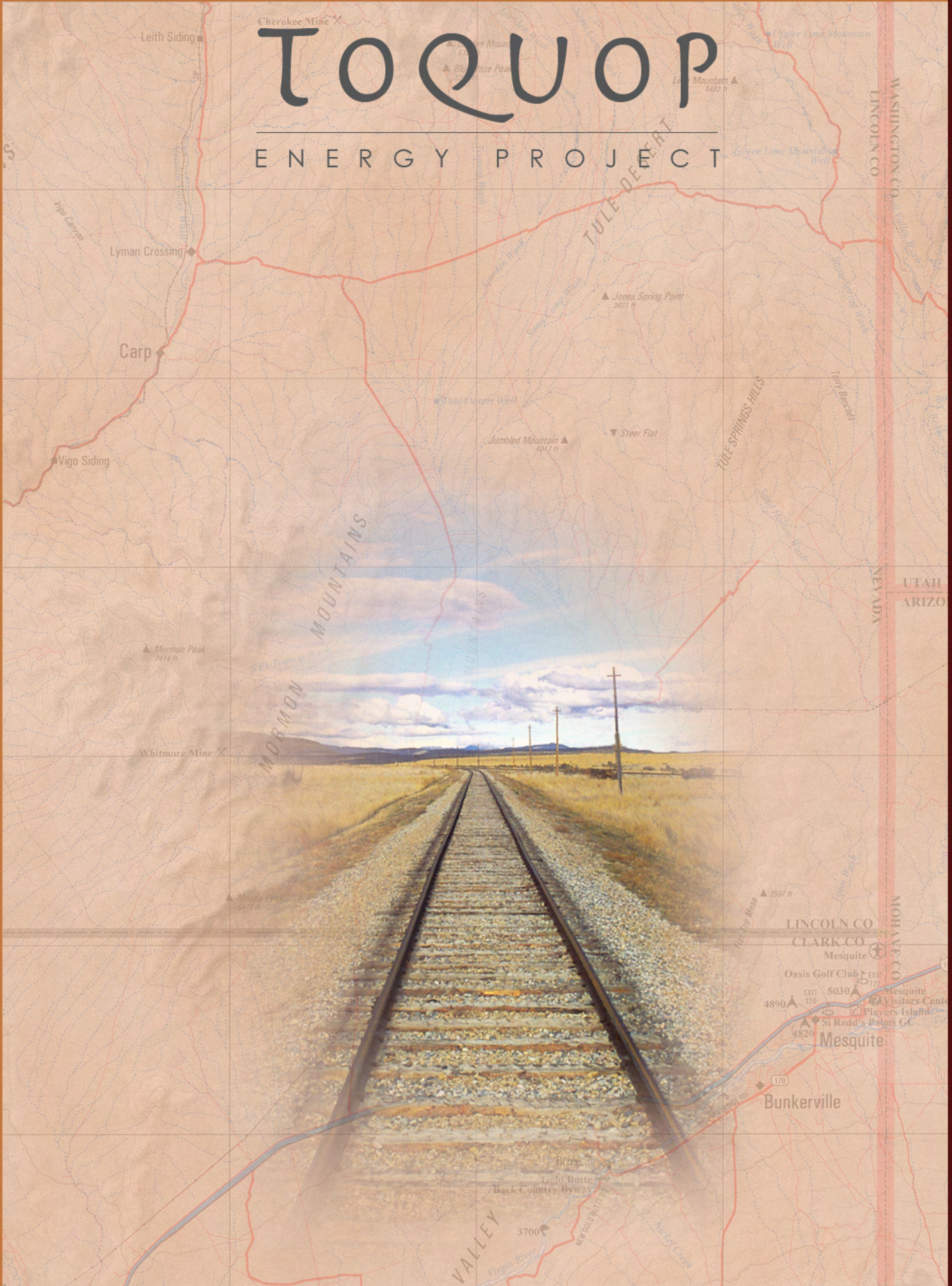


# TOQUOP

## ENERGY PROJECT

### APPENDIX A - CONSTRUCTION OF THE PROPOSED ACTION ALTERNATIVE





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### CONSTRUCTION OF THE PROPOSED ACTION ALTERNATIVE

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#### 1.0 INTRODUCTION

Chapter 2 of this Environmental Impact Statement (EIS) provides a summary description of the Proposed Action Alternative. The intent of this appendix is to provide further description of the construction of the Proposed Action Alternative. The sections below describe aspects of the planning and development for the proposed project, summarize construction and operations activities, and provide information about project abandonment.

#### 2.0 CONSTRUCTION-RELATED ACTIVITIES ASSOCIATED WITH THE POWER PLANT

A primary contractor would be responsible for all project-related engineering, procurement, and construction activities. Specific plans or proposed measures for fugitive-dust control, erosion and sedimentation control, site reclamation, stormwater-runoff control, and natural and cultural resources protection would be implemented as part of the construction process.

##### 2.1 Use of Access Roads

Construction vehicles would access the site via the permitted access road, which would be improved in accordance with an approved Plan of Development. Among other things, improvements would widen the road, straighten turns, and level grades to make the route safe for passage by vehicles up to a gross vehicle weight (GVW) of 80,000 pounds. Routes for heavy vehicles and wide loads would include the following:

- ***From Las Vegas:*** Vehicles would travel Interstate 15 N (I-15N) for 68 miles and exit at Riverside Road (exit 112), turning under the overpass to the southbound on-ramp of I-15. They would then travel 3 miles on I-15S and exit at Halfway Wash Road (exit 109), cross over the cattle guard (or cattle guard bypass gate), and then travel approximately 14.3 miles to the Toquop Energy Project.
- ***From Mesquite:*** Vehicles would travel I-15S for 6 miles, exit at 109, cross over the cattle guard (or cattle guard bypass gate) to access the beginning of Halfway Wash Road, and travel approximately 14.3 miles to the Toquop Energy Project.
- ***From the power plant site:*** Vehicles would enter I-15 at exit 109 and travel south to Glendale or on to Las Vegas. If going east or north, they would exit Glendale and travel under the overpass and return the opposite direction on I-15N.

If material exceeds a GVW of 80,000 pounds, actual routes would be dictated by the Nevada Department of Transportation based upon conditions and road-work at the time of movement.

I-15 is a National Defense Highway and capable of oversize load transfers. Once a specific material list has been generated, a specific routing guide for inland movement would be developed. These are based on anything, physical or otherwise, that would restrict the normal or standard movement and delivery of material; normally, these include project site restrictions, local route restrictions and limitations, highways, and railways leading to the project site.

Routes for passenger cars and smaller trucks would include the following:

- ***From Las Vegas:*** Vehicles would travel I-15N for 65 miles, exit at exit 109, cross the cattle guard and travel through the single-lane tunnel under I-15 to the beginning of Halfway Wash Road, and then continue 14.3 miles to the Toquop Energy Project.
- ***From Mesquite:*** Vehicles would travel I-15S, exit at exit 109, cross the cattle guard and proceed to the beginning of Halfway Wash Road, then continue 14.3 miles to the Toquop Energy Project.
- ***From the power plant site:*** North- and east-bound traffic would be able to cross under I-15 and enter traffic flow at milepost 109. West- and south-bound traffic would be able to enter I-15S at milepost 109 on the north side of the highway.

A center median crossover at milepost 109 is established for emergency use. Special situations for tall loads may allow crossing over the center median with police escort or special permission from the Nevada Department of Transportation.

Escorts would be provided for trucks in accordance with Nevada guidance or that of other applicable states.

### ***Material Deliveries***

Trucks delivering material to the site would be issued assigned time slots with predetermined date and time to deliver their material. This process controls traffic, ensures timely discharge, and permits equipment availability in order to discharge the load(s), thereby eliminating stand-by time.

The percent increase of vehicles in the area would be based on the number of employees that cannot use the Park and Ride program.

Highway 93 from Clark County into Glendale averaged 1,600 vehicles per day in 2004; this would likely increase to about 1,700 vehicles per day at the peak of construction (in 2008), with the additional 100 vehicles attributed to construction and deliveries.

I-15 at Mesquite averaged 23,815 vehicles per day in 2004; this would likely increase to about 30,115 vehicles per day at the peak of construction (in 2008), with the additional 300 vehicles attributed to construction and deliveries.

I-15 at Las Vegas averaged 23,824 vehicles per day in 2004; this would likely increase to about 32,424 vehicles per day at the peak of construction (in 2008), with the additional 600 vehicles attributed to construction and deliveries.

## **2.2 Site Preparation**

The construction contractor would provide topographic survey data and generate a balanced “cut-and-fill” site grading design. The amount of cut and fill would be determined as part of the final detailed design, pending approval of rights-of-way and acquisition of required permits. Throughout site preparation activities and beyond, the contractor would practice the principle of environmental responsibility, and remain committed to support thoughtful stewardship of the environment. The contractor would strive for avoidance of impacts on communities and natural and historic resources, coordination with resource agencies, and incorporation of environmental concerns in the decision-making process. Specific plans or proposed measures for fugitive-dust control, erosion and sedimentation control, site reclamation,

stormwater-runoff control, and natural and cultural resources protection would be implemented as identified through the National Environmental Policy Act or other permitting processes.

Construction equipment used for site preparation would include scrapers, rippers, bulldozers (up to size D-8), as well as back hoes, track hoes, loaders, graders, etc. During equipment erection, numerous cranes (up to size 150 T.), would be used along with loaders, hydraulic cranes, man lifts, back hoes, etc., depending on requirements.

### ***Power Supply***

The contractor would be responsible for providing all construction power throughout the project. The project's permanent diesel generators would perhaps be installed early to generate construction power, later to be supplemented as required by portable generation equipment until the 345 kilovolt transformers would be installed, at which time back feed would provide construction and station service. Permanent generators would be 1,200 kilowatt diesel driven; physical dimension are 40-feet long by 10-feet high by 12-feet wide with weight of 35,000 pounds.

### ***Dust Control***

The contractor would require use of water trucks to dampen earthen roadways by dispensing water to hold down dust. Further, establishment of multiple park-and-ride facilities also would contribute to dust control by reducing number of vehicles driven to the site. To further assist in controlling dust, the contractor would consider using berms as an effective means to control sediment and/or a silt fence to minimize dust.

### ***Mud Control***

The contractor would take appropriate steps to install base or aggregate in order to ensure a safe environment for vehicular traffic to the site.

## **2.3 General Description of Construction Equipment and Materials**

During construction, space would be required within the 640-acre power plant site for the following activities and facilities:

- Laydown areas (40 acres)
- Aggregate, sand, and cement storage (100,000 square feet [sf], or about 2.3 acres)
- Diesel generator(s) (4,000 sf or about 0.1 acre)
- Fabrication and storage area (70,000 sf or about 1.6 acres)
- Offices (owner, contractor, and subcontractors)
- Concrete batch plant (several local quarries are available and would provide concrete for the project)
- Employee Parking (approximately 30 acres would be required during the peak of construction)
- Craft areas
- Vehicle maintenance shop
- De-watering and site draining

- Pre-fabrication storage and assembly area
- Entry, egress, and delivery staging area

### ***Laydown Yards and Onsite Fabrication***

Normal warehouse procedures would be employed for handling material at the project site. Site laydown areas would be stylized or modified based on specific contour of the site, terrain, entry and exit points, preventative maintenance and material storage requirements, etc. The most direct route from laydown areas to the construction site would be used. Route selection would be based on consideration of material deliveries to the project as well as internal work and movement of pieces from the laydown area to the construction site. Specific scopes relative to fabrication yards would be developed for use once suppliers have been selected and their needs have been identified.

The contractor would use pre-fabricated construction schemes where possible in order to improve safety conditions by working on the ground versus in the air and accelerate erection by having various elements of plants built, then lifted into place. This capability improves safety while enabling sectional erection (heavier single lift) placement and construction, rather than single piece, single-lift work processes. This allows for construction activities to work on concurrent headings outside the prime work area, potentially improving construction performance. Local fabricators/shops/subcontractors/suppliers would be used to implement this process should onsite fabrication not be feasible.

## **2.4 General Description of Management and Construction Labor Required**

The contractor would strongly support and become actively engaged/involved in community actions/activities, and endeavor to employ as many local residents as possible for the labor force. Whenever possible, the contractor would employ qualified, disadvantaged, minority- or women-owned businesses from the local community to ensure maximum use of the local labor force.

The project would likely peak slightly above a thousand employees on site over the approximate four-year construction period.

### ***Work Hours***

The contractor would mitigate noise by structuring work hours around the local time zone. Heavy equipment operation would commence at 7:00 a.m. and terminate at 5:00 p.m. Monday through Friday. Should climatic conditions or weather preclude completion of construction milestones, work on Saturdays or Sundays might be required (as an exception, not the rule).

### ***Construction Employee Parking***

Due to the large volume of personal vehicles and related traffic control concerns, construction workers would be required to park in a designated parking area. Contractors and their employees would park in a 20-to-30-acre space on the site property adjacent to the project area. The onsite parking area would be as close as possible to the work site to allow personnel to walk to the site.

To reduce the area required on site to accommodate employee parking, the contractor would look into the feasibility of establishing a recreational-vehicle (RV) park along with a park-and-ride program in proximity to the park, or (for example) parking on a casino parking lot near Mesquite, Nevada (off I-15). The number of buses and frequency for the program would be based on the number of riders, locations, and transit time. Multiple locations and/or routes might be established to serve imported labor as well as

local residents. The contractor would monitor the program to ensure maximum ridership, and reduce onsite traffic and parking. The contractor would:

- Conduct an analysis of the traffic load periodically, making adjustments as necessary
- Work with the city of Mesquite to install 500 RV parking slots in the area of the park or other location specified by the city, etc. At the end of the construction, the contractor would turn over all improvements to the city
- Initiate a Park-and-Ride Program off-site rally point (especially during construction peaks)
- Develop a Park-and-Ride Program outside the peaks, as well as tribal routes (to be determined by number of employees)
- Evaluate and adjust low-passenger routes
- Examine lot locations and identify potential alternate sites, subtractions, and additions
- Work with local city and businesses that could accommodate and support off-site employee parking

Should an employee become ill or have to leave the site, a vehicle would take him or her to the parking area, hospital, doctor, etc., as necessary.

If necessary, the contractor would consider hiring local traffic control personnel at the designated park-and-ride areas to ensure the safety of personnel and the security of vehicles at designated parking areas.

## **2.5 Clean Up and Reclamation**

The contractor would restore to its natural condition any land that was disturbed as a result of project work.

## **2.6 Site Management**

For security and safety purposes, a fence would enclose the site. Normal access to the site would be through a primary gate with security controls. Locked gates would be installed in the perimeter fencing for emergency, operations, and maintenance access.